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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,171	10/31/2003	Michael Gerard Wallace	23614.84034	1618

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EXAMINER

HINZE, LEO T

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/699,171	Applicant(s) WALLACE, MICHAEL GERARD	
	Examiner Leo T. Hinze	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2854

DETAILED ACTION

Claim Objections

1. Claims 1-4 are objected to because of the following informalities:
 - a. In claim 1, line 2, it appears that "have" should be --having--.Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Dubois et al., US 5,086,416 (Dubois).
 - a. Regarding claim 1, Dubois teaches a clock dial comprising: a rotatable moon dial (15, Fig. 6) having a perimeter and a plurality of identical teeth uniformly spaced about said perimeter, each of said teeth being generally symmetrical (see picture of teeth on gear 15, Fig. 6); a rotatable driving gear (44, Fig. 6) having a pin (45, Fig. 6) extending therefrom, said driving gear capable of rotating in a first direction and a second direction, said pin positioned to engage one of said teeth with each rotation of said driving gear to rotatably move said moon dial (col. 2, ll. 49-61), each of said symmetrical teeth permitting said pin to move said moon forward when

Art Unit: 2854

said driving gear rotates in said first direction, and backward when said driving gear rotates in said second direction.

b. Regarding claim 5, Dubois teaches a clock dial movement device for moving a moon dial comprising: a drive disk (44, Fig. 6), said drive disk normally actuated by the clock movement, said drive disk capable of rotating in a first direction and a second direction; a pin (45, Fig. 6) protruding from said drive disk; a moon disk (15, Fig. 6) having a plurality of generally symmetrical teeth (see picture of teeth on gear 15, Fig. 6), said pin engaging said teeth such that said moon disk increments forward for each revolution of said drive disk (col. 2, ll. 49-61) in said first direction, and backward for each revolution of said drive disk in said second direction.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4, 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubois in view of Wilcox, US 2,336,519 (Wilcox).

a. Regarding claim 2:

Dubois teaches all that is claimed as discussed in the rejection of claim 1 above, including wherein said moon dial has an axis of rotation.

Art Unit: 2854

Dubois does not teach a friction means for applying rotational friction to said moon dial, said friction means mounted on said axis.

Wilcox teaches a clock with a friction washer (26, Fig. 1) that exerts frictional pressure on various parts to prevent unwanted rotation due to momentum or unbalance (p. 2, ll. 20-29).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Dubois to add a friction washer on the axle of the moon disk, because Wilcox teaches that such a washer is advantageous for exerting frictional pressure on rotating parts to prevent unwanted rotation, and a person having ordinary skill in the art would also recognize that friction washers would provide a secure assembly in the axial direction, and prevent unwanted motion of the moon disk that could cause rattles during operation.

b. Regarding claim 3, the combination of Dubois and Wilcox teaches all that is claimed as discussed in the rejection of claim 2 above. Wilcox also teaches wherein the friction means comprises a wave washer (26, Fig. 1).

c. Regarding claim 4, the combination of Dubois and Wilcox teaches all that is claimed as discussed in the rejection of claim 3 above. Dubois also teaches wherein said driving gear completes one revolution every twenty-four hours (col. 2, ll. 32-33).

d. Regarding claim 6:

Dubois teaches all that is claimed as discussed in the rejection of claim 1 above, except wherein a wave washer maintains a consistent friction with said moon disk, preventing said disk from incrementing when not engaged by said pin.

Art Unit: 2854

Wilcox teaches a clock with a friction washer (26, Fig. 1) that exerts frictional pressure on various parts to prevent unwanted rotation due to momentum or unbalance (p. 2, ll. 20-29).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Dubois to add a wave washer that maintains a consistent friction with said moon disk, preventing said disk from incrementing when not engaged by said pin, because Wilcox teaches that such a washer is advantageous for exerting frictional pressure on rotating parts to prevent unwanted rotation, and a person having ordinary skill in the art would also recognize that friction washers would provide a secure assembly in the axial direction, and prevent unwanted motion of the moon disk that could cause rattles during operation.

e. Regarding claim 9:

Dubois teaches a mechanism for rotating a moon dial on a clock movement comprising: a moon disk axis; a moon disk (15, Fig. 6) rotatable on said moon disk axis, said moon disk including images of the moon on one surface (16, Fig. 1), said moon disk including a plurality of teeth about the circumference of said moon disk, each of said teeth having a symmetric profile (see picture of teeth on gear 15, Fig. 6); and a drive disk (30, Fig. 6) rotatable about a second axis in a first direction and a second direction, said drive disk including a pin (45, Fig. 6) extending from said drive disk, said pin periodically interfitting with said teeth on said moon disk, said pin incrementally rotating said moon disk forward one tooth for each revolution of said drive disk (col. 2, ll. 49-61) in said first direction, said pin incrementally rotating said moon disk backward one tooth for each revolution of said drive disk in said second direction.

Art Unit: 2854

Dubois does not teach a friction device on said moon disk axis creating friction between said disk and said moon disk axis.

Wilcox teaches a clock with a friction washer (26, Fig. 1) that exerts frictional pressure on various parts to prevent unwanted rotation due to momentum or unbalance (p. 2, ll. 20-29).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Dubois to add a friction device on said moon disk axis creating friction between said disk and said moon disk axis, because Wilcox teaches that such a washer is advantageous for exerting frictional pressure on rotating parts to prevent unwanted rotation, and a person having ordinary skill in the art would also recognize that friction washers would provide a secure assembly in the axial direction, and prevent unwanted motion of the moon disk that could cause rattles during operation.

f. Regarding claim 10, the combination of Dubois and Wilcox teaches all that is claimed as discussed in the rejection of claim 9 above. Wilcox also teaches wherein the friction means comprises a wave washer (26, Fig. 1).

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubois in view of Wilcox as applied to claim 6 above, and further in view of Erard, US 4,548,512 (Erard).

a. Regarding claim 7:

The combination of Dubois and Wilcox teaches all that is claimed as discussed in the rejection of claim 6 above, including wherein said drive disk makes one revolution per 24 hours (Wilcox, col. 3, ll. 24-26). Dubois teaches two pins (45, Fig. 6) on drive disk 30 (Fig. 6), such that the moon disk increments two teeth for each revolution of the drive disk.

Art Unit: 2854

The combination of Dubois and Wilcox does not teach wherein said moon disk increments one tooth for each revolution of said drive disk.

Erard teaches a watch with a moon disk where the moon disk is driven by the hour wheel which rotates one revolution per 12 hours (col. 1, ll. 24-28).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Dubois wherein said drive disk makes one revolution per 12 hours, because Erard teaches that a moon disk can be driven by an hour wheel, and a person having ordinary skill in the art would recognize that one could drive the moon disk directly from an hour wheel of a clock, which rotates one revolution per 12 hours, or from a separate drive wheel which rotates one revolution per day, because a person having ordinary skill in the art would drive the moon disk by whichever method is most advantageous for each particular drive configuration and mechanism for each individual type of clock.

b. Regarding claim 8, the combination of Dubois, Wilcox and Erard teaches all that is claimed as discussed in the rejection of claim 7 above. Dubois also teaches wherein said clock has conventional hands and said disk may be incremented forward or backward by any manual or automatic rotation of said hands (col. 4, ll. 39-46).

Response to Arguments

7. Applicant's arguments with respect to the rejection of claims 1-10 based on the Zaslowsky reference have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2854

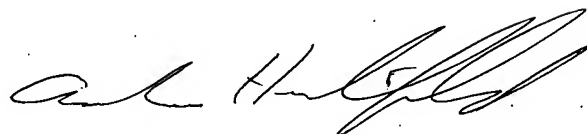
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo T. Hinze
Patent Examiner
AU 2854
02 June 2006



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